

REMARKS

I. General

Claims 1-34 were pending in the present application. All of claims 1-34 are rejected in the current Office Action (mailed January 6, 2006). The current Office Action raises the following issues:

- Consideration of References Identified in the Specification;
- Claims 4 and 32-34 are rejected under 35 U.S.C. §112, second paragraph as being indefinite;
- Claims 1, 3-17, 19-22, 25, 26, and 28-31 are rejected under 35 U.S.C. §103(a) as being unpatentable over published U.S. Patent Application No. 2004/0088380 to Chung et al. (hereinafter "*Chung*") in view of U.S. Patent No. 6,477,583 to Zayas et al. (hereinafter "*Zayas*"); and
- Claims 2, 18, 23, 24, 27, and 32-34 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Chung* in view of *Zayas* and further in view of U.S. Patent No. 5,928,331 to Bushmitch (hereinafter "*Bushmitch*").

In response, Applicant respectfully traverses the outstanding objections and claim rejections, and requests reconsideration and withdrawal thereof in light of the amendments and remarks presented herein.

II. Amendments

Claims 1, 25, and 32 are amended herein. No new matter is added by these amendments.

Claims 1, 25, and 32 are each amended to remove redundant language from their respective preambles such that each of their preambles merely recites "A method comprising:". These amendments are not intended to narrow the scope of the claims in any way, but if anything are intended to be broadening amendments which resolve potential confusion identified by the Office Action particularly with regard to claim 32 (*See* the rejection of claim 32 under 35 U.S.C. §112, second paragraph in the Office Action).

III. Consideration of References Identified in the Specification

The current Office Action notes on page 2 thereof that listing of references in the specification is not a proper information disclosure statement, and indicates that unless references have been cited by the examiner on form PTO-892, they have not been considered. However, Applicant filed a form PTO-1449 on October 21, 2003, which listed several U.S. Patent Documents and Other References. The Examiner initialed each of the listed references identified on such form PTO-1449 and dated each page of the form PTO-1449 as having been considered on 12/22/05. Thus, Applicant understands that each of these references listed on the form PTO-1449 have been properly considered by the Examiner. Further, the Office Action does not identify any reference in the specification that was not included on the form PTO-1449 and considered by the Examiner. Thus, Applicant respectfully requests that if there is any information provided in the specification of the present application which the Examiner has not considered, that the Examiner specifically identify such information in a next action so that Applicant may submit the information to be considered by the Examiner.

The current Office Action also includes a form PTO-892, which identifies several U.S. Patent Documents that have been considered by the Examiner. However, the form PTO-892 does not include all of the references cited by Applicant in the form PTO-1449 (which were initialed as considered by the Examiner). Thus, the Examiner's indication in the current Office Action that only those references cited on form PTO-892 have been considered is inaccurate, as there are many references that are initialed by the Examiner on form PTO-1449 as having been considered which are not listed on form PTO-892. Applicant notes this merely to clarify for the record that the Examiner has properly considered all of the references identified on both forms PTO-1449 and PTO-892.

IV. Rejections Under 35 U.S.C. §112, second paragraph

Claims 4 and 32-34 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Regarding claims 32-34, the Office Action asserts that claim 32 recites "a first node", "a plurality of recipient nodes", and "a file encoded with multiple description coding" at least twice. The first recitation was in the preamble of the claim, and the terms were then again introduced in the body of the claim. Applicant amends claim 32 herein to remove the language from the preamble such that it merely recites "A method comprising:". As

discussed above, to the extent this modifies the scope of the claim at all, the amendment is intended as a broadening amendment, which also resolves the potential confusion raised by the Office Action. Therefore, the rejection of claims 32-34 under 35 U.S.C. §112, second paragraph should be withdrawn.

Regarding claim 4, the Office Action asserts that the phrase “approximately” renders the scope of the claim unascertainable. No further reasoning for this rejection is provided in the Office Action. For the reasons provided below, Applicant respectfully traverses this rejection.

M.P.E.P. §2173.05(b) explains that: “The fact that claim language, including terms of degree, may not be precise, does not automatically render the claim indefinite under 35 U.S.C. 112, second paragraph.” *Citing Seattle Box Co., v. Industrial Crating & Packing, Inc.*, 221 USPQ 568 (Fed. Cir. 1984). “Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification.” M.P.E.P. § 2173.05(b). The Office Action fails to provide any such reasoning why one of ordinary skill in the art would fail to sufficiently understand the meaning of claim 4 in light of the specification. Thus, a proper rejection is not established. Further, Applicant respectfully submits that, as discussed below, the use of the term “approximately” in claim 4 is sufficiently definite under 35 U.S.C. § 112, second paragraph.

Claim 4 recites “partitioning said file into said plurality of subfiles that are each approximately equal in size.” Thus, claim 4 does not require that each of the subfiles be exactly equal in size, but instead recites that they are approximately equal in size.

M.P.E.P. § 2173.05(b) explains:

When a term of degree is presented in a claim, first a determination is to be made as to whether the specification provides some standard for measuring that degree. If it does not, a determination is made as to whether one of ordinary skill in the art, in view of the prior art and the status of the art, would be nevertheless reasonably apprised of the scope of the invention.

Applicant respectfully notes that the specification provides a standard for measuring the degree of “approximately” in at least paragraphs 0027-0028, 0036-0038, and 0045 with regard to the size of the subfiles. For instance, the specification explains at paragraph 0027

that “an efficient distribution of the file among the plurality of nodes is enabled.” Thus, one of ordinary skill in the art would recognize that an approximation that permits efficient distribution of the file would be suitable. Further, even without such a standard for measuring the degree being provided in the specification, one of ordinary skill in the art considering the subject matter of the specification would understand that each subfile need not be identical in size. For instance, the number of subfiles into which a given file is divided may not permit an equal allocation of size to each of the subfiles. Thus, one of ordinary skill in the art would appreciate how to measure the degree of “approximation” appropriate for the size of the subfiles.

Further, M.P.E.P. § 2173.05(b) also explains that: “When relative terms are used in claims wherein the improvement over the prior art rests entirely upon size or weight of an element in a combination of elements, the adequacy of the disclosure of a standard is of greater criticality.” In the present case, the claimed improvement over the prior art does not rest entirely upon the size of the recited subfiles, and thus the adequacy of the disclosure of a standard for measuring the degree of the term “approximately” in claim 4 is of less criticality.

In view of the above, the rejection of claim 4 under 35 U.S.C. §112, second paragraph should be withdrawn.

V. Rejections Under 35 U.S.C. §103(a) over *Chung* in view of *Zayas*

Claims 1, 3-17, 19-22, 25, 26, and 28-31 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Chung* in view of *Zayas*. Applicant respectfully traverses this rejection for the reasons below.

To establish a prima facie case of obviousness, three basic criteria must be met. *See* M.P.E.P. § 2143. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. Without conceding any other criteria, Applicant respectfully asserts that the rejection does not satisfy the first and third criteria, as discussed below.

A. The Applied Combination Fails to Teach or Suggest All Claim Elements

Independent Claim 1

Independent claim 1 recites:

A method comprising:
partitioning a file into a plurality of subfiles;
distributing the plurality of subfiles from a first node to a first group comprising a plurality of recipient nodes, wherein at least one subfile is distributed from the first node to each recipient node of said first group but no individual recipient node receives all of said plurality of subfiles; and
exchanging subfiles among said plurality of recipient nodes of said first group such that each recipient node of said first group obtains all of said plurality of subfiles, wherein at least one recipient node of said first group begins communicating a portion of its respective subfile that it is receiving from the first node to at least one other recipient node of said first group before the at least one recipient node fully receives its respective subfile.
(Emphasis added).

The combination of *Chung* and *Zayas* fails to teach or suggest at least the above-emphasized element of claim 1.

Chung is directed to dividing a file into subfiles which are then distributed to various servers such that the entire file is not required to be stored to each of the servers. *Chung* explains at paragraphs 0005-0006 that replicating a full file onto a large number of servers is undesirable because it uses large amounts of expensive disk storage, etc. Thus, *Chung* proposes that a file be divided into a plurality of subfiles that are distributed to different servers without requiring that the entire file be distributed to each server. FIGURE 3 of *Chung* illustrates an example in which a file is divided into 16 segments. Segments 1, 5, 9, and 13 form a first subfile "S1", segments 2, 6, 10, and 14 form a second subfile "S2", segments 3, 7, 11, and 15 form a third subfile "S3", and segments 4, 8, 12, and 16 form a fourth subfile "S4". As shown in FIGURE 4, subfiles S1 and S2 are stored to Server A, subfiles S1, S3, and S4 are stored to Server B, subfiles S1 and S3 are stored to Server C, and subfiles S2 and S4 are stored to Server D. In no case is the entire file distributed to the servers in *Chung*, but rather only a portion of the subfiles that make up the entire file are distributed to a given server.

Zayas is directed to an infrastructure in which volumes are replicated on each of a plurality of servers. The infrastructure permits different “replication modules” to be utilized for managing the replication (e.g., distributing updates to the volumes, etc.) of different volumes. For instance, FIG. 2A of *Zayas* shows an example in which a replication module A 265A is utilized for managing replication of a volume V3, while a different replication module B 265B is utilized for managing replication of volumes V1 and V2. Thus, *Zayas* explains that if one of the replication modules employed incurs large overhead for keeping the volumes that it manages consistent, this does not lead necessarily to a large overhead for the volumes managed by a different replication module, *see e.g.* column 4, lines 26-35 of *Zayas*.

Neither *Chung* nor *Zayas* teach or suggest “exchanging subfiles among said plurality of recipient nodes of said first group such that each recipient node of said first group obtains all of said plurality of subfiles, wherein at least one recipient node of said first group begins communicating a portion of its respective subfile that it is receiving from the first node to at least one other recipient node of said first group before the at least one recipient node fully receives its respective subfile”, as recited by claim 1.

The Office Action asserts that *Chung* teaches “wherein at least one recipient node of said first group begins communicating a portion of its respective subfile that it is receiving from the first node to at least one other recipient node of said first group before the at least one recipient node fully receives its respective subfile”. Applicant disagrees. *Chung* provides no teaching of one recipient node communicating a subfile that it receives to another of the recipient nodes. Thus, *Chung* certainly provides no teaching of one recipient node beginning to communicate a portion of its respective subfile to another of the recipient nodes before the one recipient node fully receives its respective subfile. The Office Action asserts at page 4 thereof that *Chung* teaches this element of claim 1 at paragraph 0016. Paragraph 0016 of *Chung* merely provides:

One aspect of the invention involves dividing a single file into multiple files or sub-files. A sub-file has a file name and other file attributes, and is treated by the operating system's file system as just another file. The divided files or sub-files may then be distributed and stored onto one or more servers. When an end user wants the file to be delivered in a streaming fashion, the sub-files can be transmitted in parallel and simultaneously from one or more servers, which increases the rate at which data can be delivered.

This portion of *Chung* mentions that the subfiles can be distributed (from an origination node that contains the full file) to the various servers, such as servers A-D of FIGURE 4. This portion of *Chung* further mentions that the subfiles from the servers can be distributed to an end user (client) in parallel. Thus, if a client such as client 610 in FIGURE 6 of *Chung* requests a file, the various subfiles S1-S4 may be sent to the client in parallel from the different servers A-D.

The above portion of *Chung* provides no teaching or suggestion of a recipient node communicating its subfile to another recipient node (e.g., one of servers A-D communicating its respective subfile to another of servers A-D). Further, the above portion of *Chung* provides no teaching or suggestion of one recipient node beginning to communicate a portion of its respective subfile to another of the recipient nodes before the one recipient node fully receives its respective subfile. Even when servers A-D communicate their respective subfiles to the client node 610, *Chung* makes no mention of the servers beginning such communication of a subfile from the server to the client before the subfile is fully received by the server.

Thus, *Chung* fails to teach or suggest the above element of claim 1. *Zayas* is not relied upon as teaching such element, nor does it do so.

Further, the Office Action concedes that *Chung* fails to teach or suggest “exchanging subfiles among said plurality of recipient nodes of said first group such that each recipient node of said first group obtains all of said plurality of subfiles”, as recited by claim 1. However, the Office Action asserts that *Zayas* teaches such exchanging of subfiles. Applicant disagrees. *Zayas* describes a system in which entire volumes of files are replicated onto a plurality of different servers. *Zayas* is not concerned, however, with how the files are distributed to the different servers. For instance, presumably one server in *Zayas* may simply distribute a full file to each of the other servers to which the file is to be replicated. *Zayas* is concerned with a system in which different modules can be used for managing updates to different volumes in order to maintain consistency in the volumes across the different servers to which they are stored. The Office Action cites to column 3, lines 35-39 of *Zayas* as teaching the above element of claim 1. Column 3, lines 35-39 of *Zayas* merely provides:

The user does not see network 215 directly, but network 215 does exist. In general, each file system 205A, 205B, and 205C stores several volumes of files, each of which can be replicated on a different set of file servers.

This merely mentions that volumes of files can be replicated to different file servers without providing any teaching as to how such files are replicated to the different file servers. Again, presumably each file may be distributed from a single server to all of the other servers in *Zayas*.

In view of the above, the applied combination of *Chung* and *Zayas* fails to teach or suggest all elements of claim 1, and thus the rejection of claim 1 should be withdrawn.

Independent Claim 17

Independent claim 17 recites:

A system comprising:
means for partitioning a file into a plurality of subfiles;
an origin node comprising means for distributing all of said plurality of subfiles from said origin node to a first group comprising a plurality of recipient nodes, wherein at least one subfile is distributed from the origin node to each recipient node of said first group but not all of said plurality of subfiles are distributed from the origin node to any of the recipient nodes of said first group; and
said recipient nodes of said first group each comprising means for exchanging their respective subfiles received from said origin node such that each recipient node of said first group obtains all of said plurality of subfiles, wherein said means for exchanging of at least one recipient node of said first group begins communicating a portion of its respective subfile that it is receiving from the first node to at least one other recipient node of said first group before the at least one recipient node fully receives its respective subfile from the origin node. (Emphasis added).

The combination of *Chung* and *Zayas* fails to teach or suggest at least the above-emphasized element of claim 17. As discussed above with claim 1, the combination of *Chung* and *Zayas* fails to teach or suggest “wherein said means for exchanging of at least one recipient node of said first group begins communicating a portion of its respective subfile that it is receiving from the first node to at least one other recipient node of said first group before the at least one recipient node fully receives its respective subfile from the origin node”, as recited by claim 17. As further discussed above with claim 1, the combination of *Chung* and

Zayas fails to teach or suggest recipient nodes “exchanging their respective subfiles received from said origin node such that each recipient node of said first group obtains all of said plurality of subfiles”, as recited by claim 17.

Accordingly, the rejection of claim 17 should be withdrawn.

Independent Claim 25

Independent claim 25 recites:

A method comprising:

distributing a plurality of subfiles that comprise a file from a first node to a first group comprising a plurality of recipient nodes, wherein at least one subfile distributed from the first node to each recipient node of said first group but no individual recipient node of said first group receives all of said plurality of subfiles from the first node; and

exchanging subfiles among said plurality of recipient nodes of said first group such that each recipient node of said first group obtains all of said plurality of subfiles, wherein at least one recipient node of said first group begins communicating a portion of its respective subfile that it is receiving from the first node to at least one other recipient node of said first group before the at least one recipient node fully receives its respective subfile.
(Emphasis added).

The combination of *Chung* and *Zayas* fails to teach or suggest at least the above-emphasized element of claim 25. As discussed above with claim 1, the combination of *Chung* and *Zayas* fails to teach or suggest “wherein at least one recipient node of said first group begins communicating a portion of its respective subfile that it is receiving from the first node to at least one other recipient node of said first group before the at least one recipient node fully receives its respective subfile”, as recited by claim 25. As further discussed above with claim 1, the combination of *Chung* and *Zayas* fails to teach or suggest “exchanging subfiles among said plurality of recipient nodes of said first group such that each recipient node of said first group obtains all of said plurality of subfiles”, as recited by claim 25.

Accordingly, the rejection of claim 25 should be withdrawn.

Dependent Claims

Each of dependent claims 3-16, 19-22, 26, and 28-31 depends, either directly or indirectly, from one of independent claims 1, 17, and 25 (and thus inherits all limitations of its respective independent claim). In view of the above, Applicant respectfully submits that independent claims 1, 17, and 25 are of patentable merit. It is respectfully submitted that dependent claims 3-16, 19-22, 26, and 28-31 are allowable at least because of their dependency from their respective independent claims for the reasons discussed above.

B. Insufficient Motivation to Combine the References in the Manner Applied

Applicant further submits that insufficient motivation exists for combining the teachings of *Chung* and *Zayas* in the manner relied upon by the Office Action. *Chung* expressly teaches at paragraphs 0005-0006 that replicating a full file onto a large number of servers is undesirable because it uses large amounts of expensive disk storage, etc. Thus, *Chung* proposes that a file be divided into a plurality of subfiles that are distributed to different servers without requiring that the entire file be distributed to each server. On the other hand, *Zayas* is directed to a system in which full volumes of files are replicated on different servers and replication modules are employed for maintaining consistency among the volumes on the various servers. Thus, *Zayas* goes directly against the teaching of *Chung*. As such, one of ordinary skill in the art would not be motivated to combine the teaching of *Zayas* with the teaching of *Chung*. Thus, for this further reason, the rejection of claims 1, 3-17, 19-22, 25, 26, and 28-31 should be withdrawn.

VI. Rejections Under 35 U.S.C. §103(a) over *Chung* in view of *Zayas* and *Bushmitch*

Claims 2, 18, 23, 24, 27, and 32-34 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Chung* in view of *Zayas* and further in view of *Bushmitch*. Applicant respectfully traverses this rejection for the reasons below.

A. The Applied Combination Fails to Teach or Suggest All Claim Elements

Independent Claim 23

Independent claim 23 recites:

A system comprising:
an origin node operable to partition a file into a plurality of subfiles, wherein said plurality of subfiles correspond in number to a number of recipient nodes in a first group to which said file is to be distributed;
said origin node operable to distribute all of said plurality of subfiles to said recipient nodes, wherein a different subfile is distributed from said origin node to each of said recipient nodes; and
said recipient nodes operable to exchange their respective subfiles received from said origin node such that each recipient node obtains all of said plurality of subfiles, wherein at least one recipient node is operable to begin communicating a portion of its respective subfile that it is receiving from the origin node to at least one other recipient node before the at least one recipient node fully receives its respective subfile from the origin node. (Emphasis added).

The combination of *Chung*, *Zayas*, and *Bushmitch* fails to teach or suggest at least the above-emphasized elements of claim 23. First, the combination fails to teach or suggest “said origin node operable to distribute all of said plurality of subfiles to said recipient nodes, wherein a different subfile is distributed from said origin node to each of said recipient nodes” (emphasis added). The Office Action appears to concede that *Chung* and *Zayas* fail to teach or suggest this element of claim 23. However, the Office Action asserts on pages 13-14 thereof that *Bushmitch* teaches this element. Applicant disagrees, as discussed below.

The Office Action cites to col. 4, lines 1-10 and Fig. 2 of *Bushmitch* as teaching this element of claim 23. Col. 4, lines 1-17 of *Bushmitch* provides:

FIG. 2 shows in greater detail how the multiple description coding works. In FIG. 2, two multimedia streams, designated X and Y are stored across a plurality of media push engines. These streams are broken into substream components, designated by subscripts, X_1, X_2, \dots, X_n ; Y_1, Y_2, \dots, Y_n . Note that the substream components stored across the plurality of media push engines are not necessarily the same for each engine. Thus media push engine 12a stores components X_1, X_6 and Y_1 . Similarly, media push engine 12b stores components X_2, X_7 and Y_2 .

The multimedia clients reassemble the data stream of interest by summing the proper substream components in the proper order. Thus multimedia client 16a reconstructs stream X as illustrated, while multimedia 16b constructs stream Y as illustrated. At the multimedia client it matters not that individual substream components arrive through different paths from different media push engines.

Thus, *Bushmitch* teaches that substream components may be stored to different multimedia push engines (MPEs), which may in turn push the substream components to a requesting client. *Bushmitch* does not teach or suggest that an origin node distribute a plurality of subfiles to recipient nodes, wherein a different subfile is distributed from said origin node to each of said recipient nodes. For instance, in the example of Fig. 2 of *Bushmitch* MPEs 12b and 12d both have substream Y₂ stored thereto.

Further, the combination of *Chung*, *Zayas*, and *Bushmitch* fails to teach or suggest “wherein at least one recipient node is operable to begin communicating a portion of its respective subfile that it is receiving from the origin node to at least one other recipient node before the at least one recipient node fully receives its respective subfile from the origin node”, as recited by claim 23. The Office Action relies upon *Chung* as teaching this element, *see* page 13 of the Office Action. However, as discussed above with claim 1, *Chung* does not teach or suggest this element. *Zayas* and *Bushmitch* are not relied upon as teaching or suggesting this element of claim 23, nor do they do so.

Additionally, the combination of *Chung*, *Zayas*, and *Bushmitch* fails to teach or suggest “said recipient nodes operable to exchange their respective subfiles received from said origin node such that each recipient node obtains all of said plurality of subfiles”, as recited by claim 23. The Office Action relies upon *Zayas* as teaching this element of claim 23, *see* page 13 of the Office Action. However, as discussed above with claim 1, *Zayas* does not teach or suggest this element. *Chung* and *Bushmitch* are not relied upon as teaching or suggesting this element of claim 23, nor do they do so.

In view of the above, the combination of *Chung*, *Zayas*, and *Bushmitch* fails to teach or suggest all elements of claim 23, and therefore the rejection of claim 23 should be withdrawn.

Independent Claim 32

Independent claim 32 recites:

A method comprising:
distributing a plurality of descriptors of a file encoded with multiple description coding (MDC) from a first node to a first group comprising a plurality of recipient nodes, wherein at least one descriptor is distributed from the first node to each recipient node of said first group but not all of said plurality of descriptors are distributed from the first node to any of the recipient nodes of said first group; and
said plurality of recipient nodes of said first group exchanging their respective descriptors such that each recipient node of said first group obtains all of said plurality of descriptors, wherein at least one recipient node of said first group begins communicating a portion of its respective descriptor that it is receiving from the first node to at least one other recipient node of said first group before the at least one recipient node fully receives its respective descriptor from the first node. (Emphasis added).

The combination of *Chung*, *Zayas*, and *Bushmitch* fails to teach or suggest at least the above-emphasized element of claim 32. First, the combination fails to teach or suggest “wherein at least one recipient node of said first group begins communicating a portion of its respective descriptor that it is receiving from the first node to at least one other recipient node of said first group before the at least one recipient node fully receives its respective descriptor from the first node”, as recited by claim 32. The Office Action relies upon *Chung* as teaching this element, *see* page 16 of the Office Action. However, *Chung* does not teach or suggest this element. As discussed above with claim 1, *Chung* provides no teaching or suggestion of one recipient node beginning to communicate information (e.g., a descriptor) to another recipient node before the one recipient node fully receives such information itself. *Zayas* and *Bushmitch* are not relied upon as teaching or suggesting this element of claim 32, nor do they do so.

Additionally, the combination of *Chung*, *Zayas*, and *Bushmitch* fails to teach or suggest “said plurality of recipient nodes of said first group exchanging their respective descriptors such that each recipient node of said first group obtains all of said plurality of descriptors”, as recited by claim 32. The Office Action relies upon *Zayas* as teaching this element of claim 32, *see* page 16 of the Office Action. However, *Zayas* does not teach or suggest this element. As discussed above with claim 1, *Zayas* is not concerned with how the

files (or descriptors for that matter) are distributed to the different servers. For instance, presumably one server in *Zayas* may simply distribute a full file to each of the other servers to which the file is to be replicated. (It is also noted that *Zayas* makes no mention of distributing “descriptors” as recited by claim 32). *Chung* and *Bushmitch* are not relied upon as teaching or suggesting this element of claim 32, nor do they do so.

In view of the above, the combination of *Chung*, *Zayas*, and *Bushmitch* fails to teach or suggest all elements of claim 32, and therefore the rejection of claim 32 should be withdrawn.

Dependent Claims

Each of dependent claims 2, 18, 24, 27, and 33-34 depends, either directly or indirectly, from one of independent claims 1, 17, 23, 25, and 32 (and thus inherits all limitations of its respective independent claim). In view of the above, Applicant respectfully submits that independent claims 1, 17, 23, 25, and 32 are of patentable merit. It is respectfully submitted that dependent claims 2, 18, 24, 27, and 33-34 are allowable at least because of their dependency from their respective independent claims for the reasons discussed above.

B. Insufficient Motivation to Combine the References in the Manner Applied

Applicant further submits that insufficient motivation exists for combining the teachings of *Chung*, *Zayas*, and *Bushmitch* in the manner relied upon by the Office Action. As discussed above, *Chung* expressly teaches at paragraphs 0005-0006 that replicating a full file onto a large number of servers is undesirable because it uses large amounts of expensive disk storage, etc. Thus, *Chung* proposes that a file be divided into a plurality of subfiles that are distributed to different servers without requiring that the entire file be distributed to each server. On the other hand, *Zayas* is directed to a system in which full volumes of files are replicated on different servers and replication modules are employed for maintaining consistency among the volumes on the various servers. Thus, *Zayas* goes directly against the teaching of *Chung*. As such, one of ordinary skill in the art would not be motivated to combine at least the teaching of *Zayas* with the teaching of *Chung*. Thus, for this further reason, the rejection of claims 2, 18, 23, 24, 27, and 32-34 should be withdrawn.

VII. Conclusion

In view of the above, Applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge Deposit Account No. 08-2025, under Order No. 200310234-1 from which the undersigned is authorized to draw.

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Label No. EV 568259928US in an envelope addressed to: M/S Amendment, Commissioner for Patents, Alexandria, VA 22313.

Date of Deposit: April 5, 2006

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